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METHOD OF OPERATION
TRUNK CIRCUIT

Verifying - Incoming From Final Multiple - Use Where Zero Operator's Trunks Have - 34 Ohm Sleeve - Special "A" Switchboard - Full Mechanical Power Driven System.

GENERAL DESCRIPTION

1. This circuit is used at a special "A" switchboard position for verifying busy line reports, cut off calls, and reports of the failure of a subscriber to answer a call.

2. One end terminates in the final multiple and at the outgoing end is used with zero and intercepted operator's cord circuits.

DETAILED DESCRIPTION

OPERATION

3. When the terminals of this trunk are seized by the final selector, the SL relay operates, in turn operating the T and S relays. The T relay operated, closes a circuit in part to trip machine ringing current. The S relay operates, and locks over the tip from ground in the incoming circuit closing a circuit through the contacts of the CO, and SL relays lighting the trunk signal lamp and connecting ground to the tip side of the trunk preventing the supervisory relay in the cordless circuit from operating.

4. When the plug of a cord at the intercepted position is inserted in the answering jack the F and CO relays operate. The operation of the F relay disconnects ground from the winding of the S relay and connects ground to the ring of the trunk circuit, operating the supervisory relay in the incoming, or cordless trunk circuit. The CO relay operated, extinguishes the trunk signal lamp, and opens the circuit through the T relay. The operation of the CO relay connects ground through its make contact, 18-G resistance, make contact of the T relay to the ring of the trunk circuit tripping machine ringing current. The T relay is slow in releasing to allow a sufficient time interval to trip machine ringing in the trunk circuit.

5. When the receiver is replaced on the switchhook at the subscriber's station, the S relay releases. The S relay released, causes the supervisory lamp in the cord circuit to light. When the plug of the answering cord is withdrawn from the jack the F relay releases, but the CO relay is held operated through its 400 ohm winding until the SL relay releases. The S relay released, disconnects ground from the ring of the final trunk circuit releasing the associated final selector. When the final selector is restored to normal the SL relay releases in turn releasing the CO relay, restoring the circuit to normal.

6. In case the intercepted operator disconnects before the distant operator, the F relay will release. The F relay released disconnects ground from

the ring of the final circuit, and connects ground to the tip of the final circuit, causing the disconnect lamp to light at the distant position. When the distant and cordless operators both disconnect the final selector is released, restoring the circuit to normal.

7. When the flashing key is operated at the intercepted position, the F relay releases disconnecting ground from the ring of the trunk and connecting ground to the tip of the trunk, which will allow the supervisory relay in the cordless to release causing the supervisory lamp to flash in the distant operator's cord circuit.

CIRCUIT REQUIREMENTS

	OPERATE	NON-OPERATE	RELEASE
162-R (T)	Test .023 amp. Readj. .021 amp.	Test .016 amp. Readj. .017 amp.	
E159 (C0) inner (32)	Test .088 amp. Readj. .083 amp.	Test .062 amp. Readj. .066 amp.	
Outer (400)	Test .050 amp.		
E231 (F) Outer	Test .026 amp. Readj. .017 amp.	Test .0085 amp. Readj. .009 amp.	
Inner	Test .023 amp.		
E648 (SL) Windings in series	Test .033 amp. Readj. .017 amp.	Test .010 amp. Readj. .011 amp.	
Inner (100)	Test .090 amp.	Test .026 amp.	
E829 (S)	Test .036 amp. Readj. .024 amp.		Test .002 amp. Readj. .004 amp.

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